Name:

Date:

School:

Facilitator:

* 1. Curve of Best Fit

1. Write a quadratic equation that has a vertex (3, -1) and passes through the point (6, 4)

2. Write a quadratic function that has *x*-intercepts (-3, 0) and (4, 0) and passes through the point (5, 8)

3. Find the quadratic model of best fit for the data in the table. The height of a potato each second after it is shot from a potato launcher. Let *x* = the number of seconds and *y* represent the height of the potato.

*[Round your parameters to the nearest hundredth.]*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **x** | **1** | **2** | **3** | **4** | **5** | **6** |
| **y** | **15** | **26** | **30** | **24** | **13** | **2** |